

FIG. 1

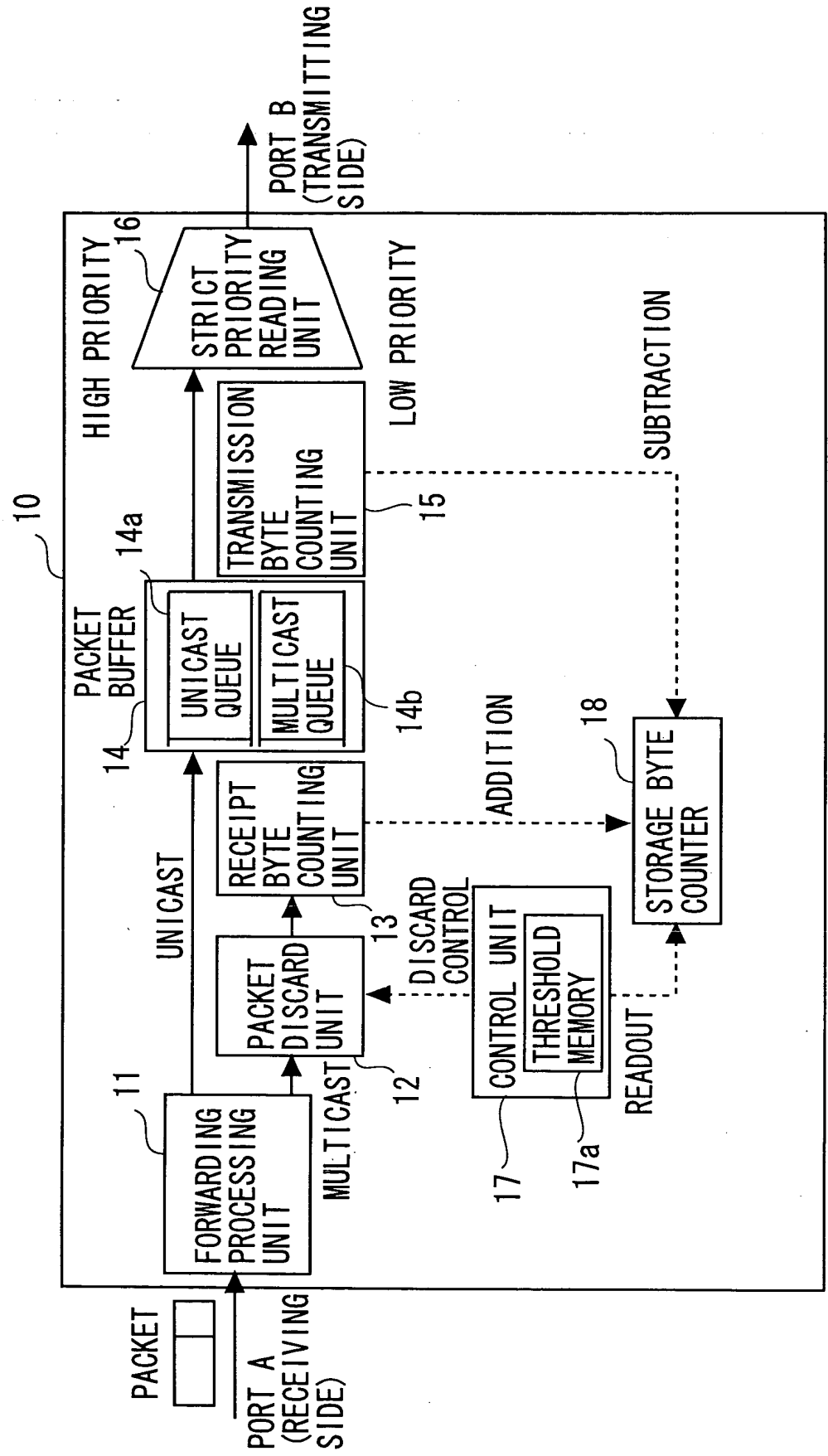
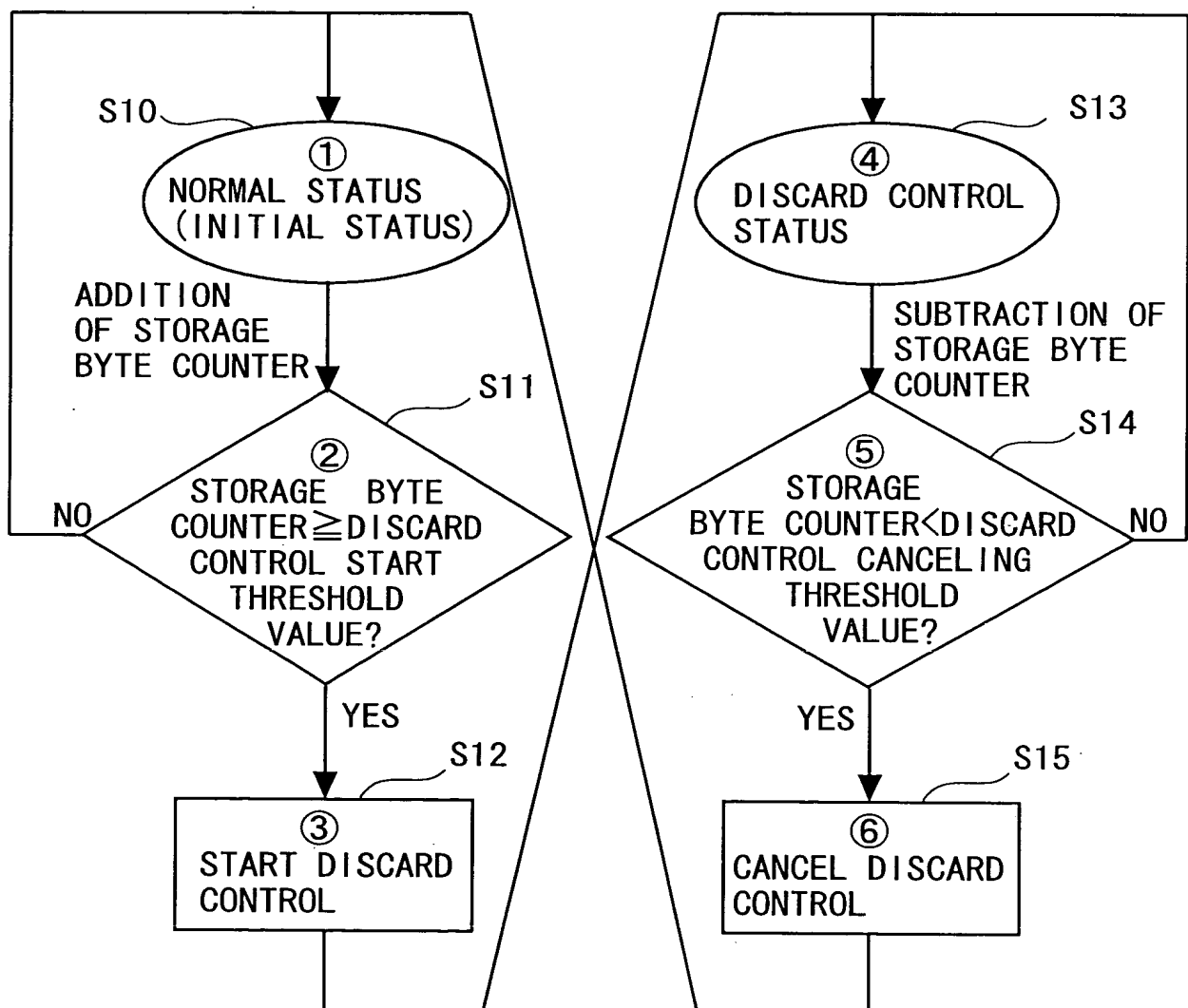


FIG. 2



The diagram illustrates the internal architecture of a packet forwarding device 20. Data enters via **PORT A (RECEIVING SIDE)** as a **PACKET**. It is processed by the **FORWARDING PROCESSING UNIT (21)**, which then routes it to either the **UNICAST** or **MULTICAST** path. The **MULTICAST** path involves a **PACKET GROUP ANALYZING UNIT (22)** and a **CLASS TRANSLATION UNIT (23)**. The **UNICAST** path goes directly to the **PACKET BUFFER (25)**, which contains a **UNICAST QUEUE (25a)** and a **MULTICAST QUEUE (25b)**. Both paths lead to a **RECEIPT BYTE COUNTING UNIT (24)**. This unit is part of a **LOW PRIORITIZATION CONTROL (28)** system that also includes a **CONTROL UNIT (28a)** with **GROUP-BY-GROUP THRESHOLD MEMORY** (containing $Tg1, Tg2, \dots, Tgn$) and a **GROUP-BY-GROUP STORAGE BYTE COUNTER** (containing $Cg1, Cg2, \dots, Cgn$). The **RECEIPT BYTE COUNTING UNIT (24)** sends data to the **TRANSMISSION BYTE COUNTING UNIT (26)** and also provides input to the **LOW PRIORITIZATION CONTROL (28)**. The **TRANSMISSION BYTE COUNTING UNIT (26)** sends data to the **STRICT PRIORITY READING UNIT (27)** and also provides input to the **LOW PRIORITIZATION CONTROL (28)**. The **STRICT PRIORITY READING UNIT (27)** outputs to **PORT B (TRANSMITTING SIDE)**. The **LOW PRIORITIZATION CONTROL (28)** also includes a **SUBTRACTION (29)** path. The **CONTROL UNIT (28a)** performs **ADDITION** and **READOUT** operations on the threshold memory and storage byte counter.

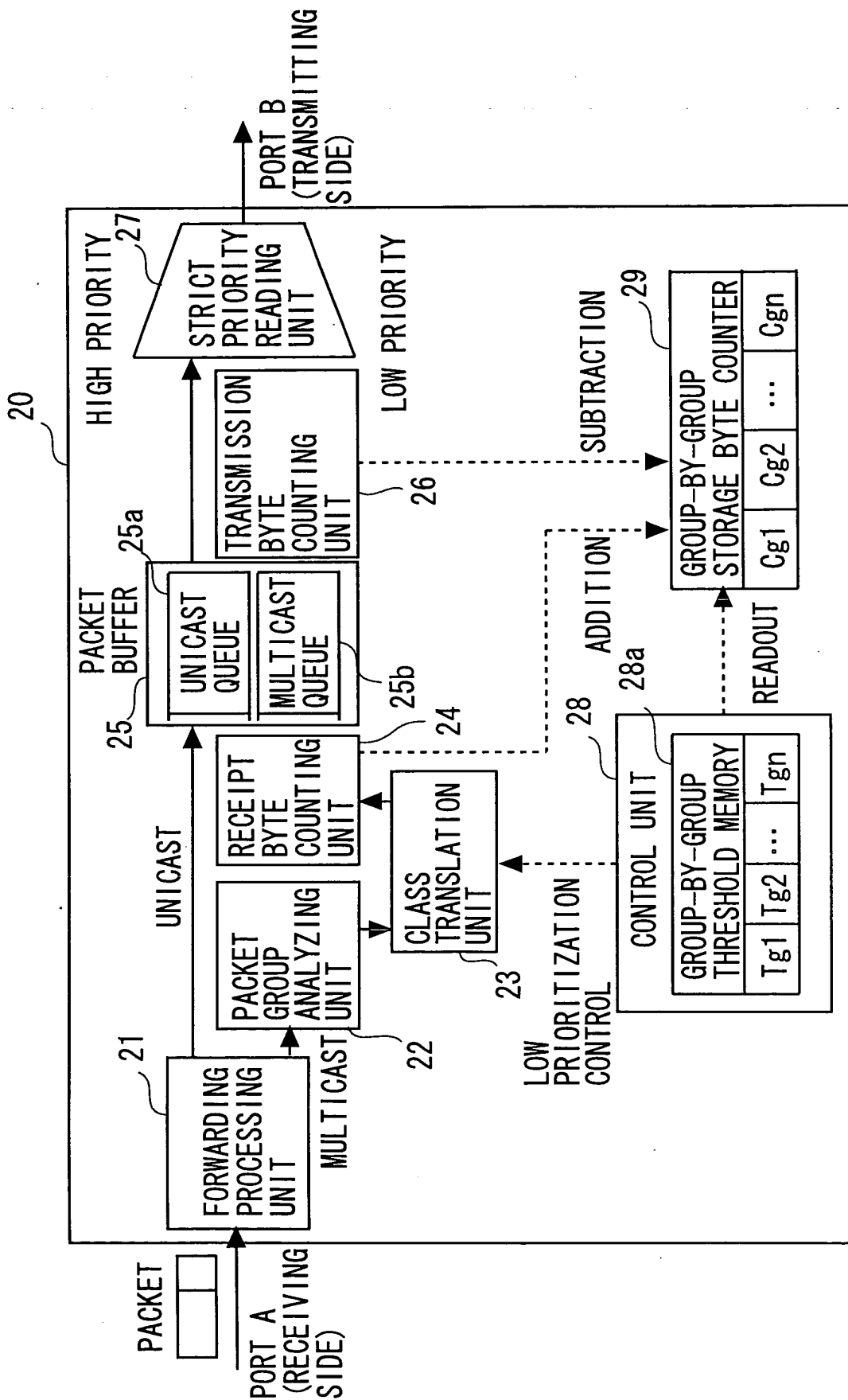


FIG. 4

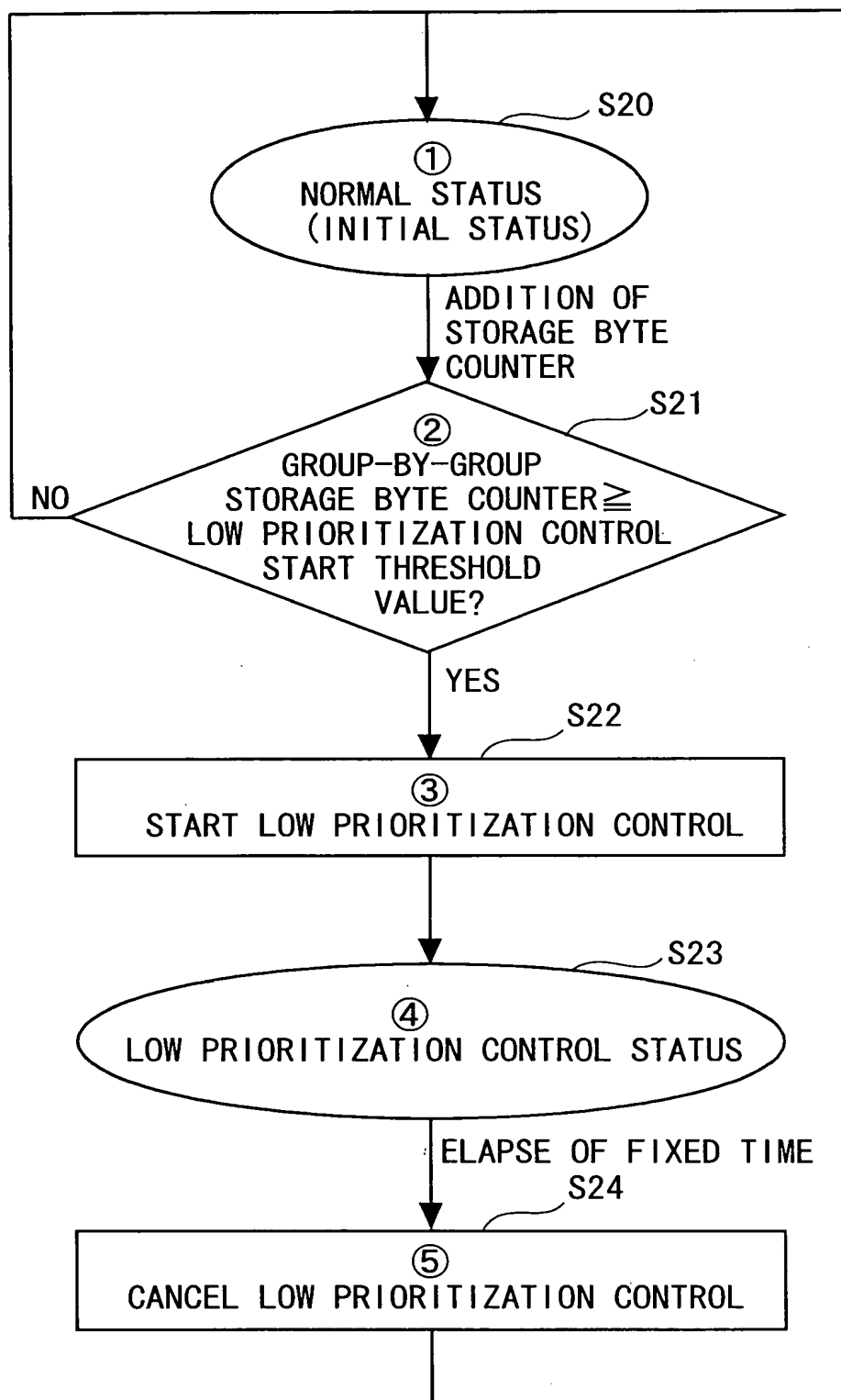


FIG. 5

